Amendments In the Claims

Please amend claims 1, 4-16, 21, 24-36, 41-47, 49-52, 54, 59, and 62-74 as follows:

1.   (Currently Amended) A computer-implemented method ~~for generating a configurator~~ comprising:

>   **generating a customizable product configurator, said generating comprising**
>>   creating a customizable product class, **wherein**
>>>   the customizable product class **comprises** ~~including~~ a set of one or more attributes to define the customizable product class;
>>   adding a component product class to the customizable product class,
>>>   **wherein**
>>>   the component product class is a subclass of the customizable product class; and
>>   mapping a customizable **user interface** (UI) to the customizable product class, **wherein**
>>>   the customizable UI ~~to~~ provide**s** **an** access structure to the
>>>>   **customizable product** configurator,
>>>>   **elements of the customizable UI access structure correspond to elements of the customizable product class,**
>>>   ~~wherein~~ the customizable product class is **configured** to represent a consumer product, and
>>>   the component product class is **configured** to represent one or more components of the consumer product.

2.   (Original) The method of claim 1 wherein the component product class includes component product subclasses.

3.   (Original) The method of claim 1 wherein the component product class inherits the attributes of the customizable product class.

4.   (Currently Amended) The method of claim 1 <u>wherein said generating</u> further compris<u>es</u>[[ing]]:

adding one or more component product classes to a port; and

adding the port to the customizable product class, <u>wherein</u>

the port [[to]] allow<u>s</u> the configurator to classify a group of component products.

5.   (Currently Amended) The method of claim 4<u>,</u> wherein

the port <u>comprises</u> ~~includes~~ a cardinality attribute, <u>and</u>

the cardinality attribute ~~to~~ constrain<u>s</u> the number of component products to be added by the configurator.

6.   (Currently Amended) The method of claim 5<u>,</u> wherein

the cardinality attribute <u>comprises</u> ~~includes~~ a minimum cardinality and a maximum cardinality,

the minimum cardinality ~~to~~ constrain<u>s</u> the minimum number of component products to be added by the configurator, <u>and</u>

the maximum cardinality ~~to~~ constrain<u>s</u> the maximum number of component products to be added by the configurator.

7.   (Currently Amended) The method of claim 5<u>,</u> wherein

the cardinality attribute <u>comprises</u> ~~includes~~ a default cardinality, <u>and</u>

the default cardinality defines a quantity of the component product class added by the configurator.

8.   (Currently Amended) The method of claim 1 wherein the mapping <u>comprises:</u> ~~to include~~

building the customizable UI from a set of themes, groups, and controls.

9.   (Currently Amended) The method of claim 8 wherein <u>a theme of</u> the <u>set of</u> themes<u>, groups, and controls comprises one or more of</u> ~~are~~ tabs and wizards.

10.   (Currently Amended) The method of claim 8 wherein each theme in the set of themes, groups, and controls **comprises** ~~includes~~ at least one of the set of background colors, fonts, and multi-linguals.

11.   (Currently Amended) The method of claim 8 wherein **a group of the set of themes, groups, and controls comprises** ~~the group includes~~ one or more of the controls.

12.   (Currently Amended) The method of claim 8 wherein **a** ~~the~~ control **of the set of themes, groups, and controls comprises** ~~includes~~ one or more of a drop down box, a radio button, and a list box.

13.   (Currently Amended) The method of claim 1 **further comprising:** ~~wherein the customizable UI is used to generate~~ **generating** a user interface for **the** [[a]] component product class **using the customizable UI**.

14.   (Currently Amended) The method of claim 1 wherein the customizable UI is a subclass of the customizable product **class**.

15.   (Currently Amended) The method of claim 1 **further comprising:** ~~wherein the customizable UI is used to generate~~ **generating** a configurator user interface with HTML, Applets, and ActiveX programming languages**,** **wherein** **said generating uses the customizable UI**.

16.   (Currently Amended) The method of claim 1**,** wherein the component product class **comprises** ~~includes~~ a static attribute, **and** the static attribute is not associated with a parent class.

17.   (Original) The method of claim 1 wherein the component product class, customizable class rules, and UI class are object oriented classes.

18.   (Original) The method of claim 1 wherein the customizable product has an object oriented structure.

19.   (Original) The method of claim 1 wherein the customizable product includes versioning.

20.   (Original) The method of claim 1 wherein the configurator is stored in a data store.

21.   **(Currently Amended)** A machine-readable medium that provides instructions, which when executed by a set of one or more processors, cause the set of processors to perform operations ~~for generating a configurator~~ comprising:

       generating a customizable product configurator, said generating comprising

          creating a customizable product class, **wherein**

              the customizable product **class comprises** ~~including~~ a set of one or more attributes to define the customizable product **class**;

          adding a component product class to the customizable product class,

              wherein

              the component product class is a subclass of the customizable product **class**; and

          mapping a customizable UI to the customizable product class, **wherein**

              the customizable UI ~~to~~ provides **an** access structure to the configurator**,**

              elements of the customizable UI access structure correspond to elements of the customizable product class,

              ~~wherein~~ the customizable product class is **configured** to represent a consumer product**,** and

              the component product class is **configured** to represent one or more components of the consumer product.

22.   (Original) The machine-readable medium of claim 21 wherein the component product class includes component product subclasses.

23.   (Original) The machine-readable medium of claim 21 wherein the component product class inherits the attributes of the customizable product class.

24.   (Currently Amended) The machine-readable medium of claim 21 further **provides instructions that cause the set of processors to perform operations** comprising:

adding one or more component product classes to a port; and

adding the port to the customizable product class, **wherein**

the port [[to]] allow<u>s</u> the configurator to classify a group of component products.

25.   (Currently Amended) The machine-readable medium of claim 24<u>,</u> wherein

the port **comprises** ~~includes~~ a cardinality attribute, **and**

the cardinality attribute ~~to~~ constrain the number of component products to be added by the configurator.

26.   (Currently Amended) The machine-readable medium of claim 25<u>,</u> wherein

the cardinality attribute **comprises** ~~includes~~ a minimum cardinality and a maximum cardinality,

the minimum cardinality ~~to~~ constrain<u>s</u> the minimum number of component products to be added by the configurator, **and**

the maximum cardinality ~~to~~ constrain<u>s</u> the maximum number of component products to be added by the configurator.

27.   (Currently Amended) The machine-readable medium of claim 25<u>,</u> wherein

the cardinality attribute **comprises** ~~includes~~ a default cardinality, **and**

the default cardinality defines a quantity of the component product class added by the configurator.

28.   (Currently Amended) The machine-readable medium of claim 21 **further providing instructions for** ~~wherein~~ the mapping **comprising:** ~~to include~~ building the customizable UI from a set of themes, groups, and controls.

29.   (Currently Amended) The machine-readable medium of claim 28 wherein **a theme of** the **set of** themes**, groups, and controls comprises one or more of** ~~includes~~ tabs and wizards.

30.   (Currently Amended) The machine-readable medium of claim 28 wherein **a theme of** the **set of** theme**s, groups, and controls comprises one or more of** ~~includes~~ background color**s**, fonts, and multi-lingual**s**.

31.   (Currently Amended) The machine-readable medium of claim 28 wherein **a group of the set of themes, groups, and controls comprises** ~~the group includes~~ one or more of the controls.

32.   (Currently Amended) The machine-readable medium of claim 28 wherein **a** ~~the~~ control **of the set of themes, groups, and controls comprises** ~~includes~~ one or more of a drop down box, a radio button, and a list box.

33.   (Currently Amended) The machine-readable medium of claim 21 **that further provides instructions causing the set of processors to perform operations comprising:** ~~wherein the customizable UI is used to generate~~
  generating a user interface for **the** [[a]] component product class **using the customizable UI**.

34.   (Currently Amended) The machine-readable medium of claim 21 wherein the customizable UI is a subclass of the customizable product **class**.

35.   (Currently Amended) The machine-readable medium of claim 21 **that further provides instructions causing the set of processors to perform operations comprising:** ~~wherein the customizable UI is used to generate~~

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generating a configurator user interface with HTML, Applets, and ActiveX

programming languages__, wherein__

__said generating uses the customizable UI__.

36. (**Currently Amended**) The machine-readable medium of claim 21__,__

wherein

the component product class __comprises__ ~~includes~~ a static attribute, __and__

the static attribute is not associated with a parent class.

37. (Original) The machine-readable medium of claim 21 wherein the
component product class, customizable class rules, and UI class are object oriented
classes.

38. (Original) The machine-readable medium of claim 21 wherein the
customizable product has an object oriented structure.

39. (Original) The machine-readable medium of claim 21 wherein the
customizable product includes versioning.

40. (Original) The machine-readable medium of claim 21 wherein the
configurator is stored in a data store.

41. (**Currently Amended**) An object oriented configurator comprising:
a customizable product class;
a component product __class, wherein__

the component product __class__ is a subclass of the customizable product

__class, and__

the component product __class__ inherits a set of one or more attributes from

the customizable product class; and

a customizable UI, __wherein__

the customizable UI is mapped to the customizable product __class__

providing a view of the component product,

~~wherein~~ the customizable product class is __configured__ to represent a

consumer product, and

the component product class is __configured__ to represent one or more

components of the consumer product.

42.   (**Currently Amended**) The object oriented configurator in claim 41

further comprising:

a port, ~~the port~~ comprising a set of one or more ~~of the~~ component products __of the__

__component product class__.

43.   (**Currently Amended**) The object oriented configurator in claim 42,

wherein

the port __comprises__ ~~includes~~ a cardinality, __and__

the cardinality ~~to~~ constrain_s_ the number of component products to add to the

customizable product class.

44.   (**Currently Amended**) The object oriented configurator in claim 43,

wherein

the cardinality attribute __comprises__ ~~includes~~ a minimum cardinality and a

maximum cardinality,

the minimum cardinality ~~to~~ constrain_s_ the minimum number of component

products to be added by the configurator, __and__

the maximum cardinality ~~to~~ constrain_s_ the maximum number of component

products to be added by the configurator.

45.   (**Currently Amended**) The object oriented configurator in claim 43,

wherein

the cardinality __comprises__ ~~includes~~ a default cardinality, __and__

the default cardinality defines a quantity of the component product class added by

the configurator.

46.   (Currently Amended) The object oriented configurator in claim 41 **wherein** the customizable class rule, and customizable UI are subclasses of the customizable product **class**.

47.   (Currently Amended) The object oriented configurator in claim 41**,** wherein

the component product **class comprises** ~~includes~~ a static attribute, **and**

the static attribute is not inherited from a parent class.

48.   (Original) The object oriented configurator in claim 41 wherein the attribute is of type string, number, date, and Boolean.

49.   (Currently Amended) The object oriented configurator in claim 41 further comprising a second customizable product **class**.

50.   (Currently Amended) The object oriented configurator in claim 49 wherein the **second customizable product class comprises one or more component products of the** component product **class** ~~includes one or more of a second customizable product~~.

51.   (Currently Amended) The object oriented configurator in claim 41 wherein **a** ~~the~~ component product **of the component product class** includes an expression to restrict the component product from becoming a subclass of the customizable product class.

52.   (Currently Amended) The object oriented configurator in claim 41 further comprising:

a script**,** ~~the script~~ **configured** to communicate with another application.

53.   (Original) The object oriented configurator in claim 41 wherein the customizable UI includes a theme, group, and control.

54. **(Currently Amended)** The object oriented configurator in claim 41 wherein the theme includes **one or more of** a tab, wizard, font, and color.

55. (Original) The object oriented configurator in claim 41 wherein the control includes one or more of a drop down box, a radio button, and a list box.

56. (Original) The object oriented configurator in claim 41 wherein the customizable UI map comprises HTML, JAVA applets, and ActiveX components.

57. (Original) The object oriented configurator in claim 41 wherein each component product class has an unique identifier, the unique identifier is used to locate an associative component product.

58. (Original) The object oriented configurator in claim 41 further comprising link items.

59. **(Currently Amended)** An apparatus comprising:
 means for generating a customizable product configurator, said means for
   generating comprising
  means for creating a customizable product class, **wherein**
    the customizable product class **comprises** ~~including~~ a set of one or
      more attributes to define the customizable product class;
  means for adding a component product class to the customizable product
    class, **wherein**
    the component product class is a subclass of the customizable
      product class; and
  means for mapping a customizable UI to the customizable product class,
    wherein
    the customizable UI ~~to~~ provide**s an** access structure to the
      configurator,
    elements of the customizable UI access structure correspond to
      elements of the customizable product class,

~~wherein~~ the customizable product class is **configured** to represent

a consumer product, and

the component product class is **configured** to represent one or

more components of the consumer product.

60.   (Previously Presented) The apparatus of claim 59 wherein the component product class includes component product subclasses.

61.   (Previously Presented) The apparatus of claim 59 wherein the component product class inherits the attributes of the customizable product class.

62.   (Currently Amended) The apparatus of claim 59 **wherein said means for generating** further **comprises** ~~comprising~~:

means for adding one or more component product classes to a port; and

means for adding the port to the customizable product class, **wherein**

the port ~~to~~ allow**s** the configurator to classify a group of component

products.

63.   (Currently Amended) The apparatus of claim 62, wherein

the port **comprises** ~~includes~~ a cardinality attribute, **and**

the cardinality attribute ~~to~~ constrain**s** the number of component products to be

added by the configurator.

64.   (Currently Amended) The apparatus of claim 63, wherein

the cardinality attribute **comprises** ~~includes~~ a minimum cardinality and a

maximum cardinality,

the minimum cardinality ~~to~~ constrain**s** the minimum number of component

products to be added by the configurator, **and**

the maximum cardinality ~~to~~ constrain**s** the maximum number of component

products to be added by the configurator.

65.   (Currently Amended) The apparatus of claim 63, wherein

the cardinality attribute **comprises** ~~includes~~ a default cardinality, **and**

the default cardinality defines a quantity of the component product class added by

the configurator.

66.   (Currently Amended) The apparatus of claim 59 wherein the means for

mapping **comprises:** ~~includes~~

means for building the customizable UI from a set of themes, groups, and

controls.

67.   (Currently Amended) The apparatus of claim 66 wherein **a theme of** the

set of themes**, groups, and controls comprises one or more of** ~~are~~ tabs and wizards.

68.   (Currently Amended) The apparatus of claim 66 wherein each theme in

the set of themes, groups, and controls **comprises** ~~includes~~ at least one of **a** ~~the~~ set of

background colors, fonts, and multi-linguals.

69.   (Currently Amended) The apparatus of claim 66 wherein **a group of the**

set of themes, groups, and controls comprises ~~the group includes~~ one or more of the

controls.

70.   (Currently Amended) The apparatus of claim 66 wherein **a control of**

the set of themes, groups, and controls comprises ~~the control includes~~ one or more of

a drop down box, a radio button, and a list box.

71.   (Currently Amended) The apparatus of claim 59 wherein **the means for**

generating further comprises:

means for generating ~~the customizable UI is used to generate~~ a user interface

for a component product class **using the customizable UI**.

72.   (Currently Amended) The apparatus of claim 59 wherein the

customizable UI is a subclass of the customizable product **class**.

73.   (Currently Amended) The apparatus of claim 59 wherein **the means for**

generating further comprises:

means for generating ~~the customizable UI is used to generate~~ a configurator

user interface with HTML, Applets, and ActiveX programming languages,

wherein

the means for generating uses the customizable UI.

74.   **(Currently Amended)** The apparatus of claim 59, wherein

the component product class **comprises** ~~includes~~ a static attribute, **and**

the static attribute is not associated with a parent class.

75.   (Previously Presented) The apparatus of claim 59 wherein the component

product class, customizable class rules, and UI class are object oriented classes.

76.   (Previously Presented) The apparatus of claim 59 wherein the

customizable product has an object oriented structure.

77.   (Previously Presented) The apparatus of claim 59 wherein the

customizable product includes versioning.

78.   (Previously Presented) The apparatus of claim 59 wherein the

configurator is stored in a data store.